

REMARKS

This amendment responds to the Office Action mailed on October 27, 2009.

The Examiner rejected claims 23-25, 27, 29, 33, and 34 under 35 U.S.C. § 103(a) as being unpatentable over Gvozdanovic et al., U.S. Patent No. 6,660,720 in view of Seo, U.S. Patent No. 6,959,448, and in further view of Fang, U.S. Patent Application Pub. No. 2007/0064722 and Gross, U.S. Patent Application Pub. Serial No. 2004/0062207. The Examiner rejected each of claims 28 and 30, and 31 under 35 U.S.C. § 103(a) as being unpatentable over respective combinations, each citing Gvozdanovic, Seo, Fang, and Gross, respectively. The Examiner rejected claims 35-37, 40, and 44 under 35 U.S.C. § 103(a) as being unpatentable over Gvozdanovic, Seo, and Gross. The Examiner rejected claims 39, 41, 42, and 45 under 35 U.S.C. § 103(a) as being unpatentable over respective combinations, each including Gvozdanovic, Seo, and Gross as the primary, secondary, and tertiary references, respectively.

The applicant notes that the Examiner has failed to state a prima facie case of obviousness because the Examiner has failed to allege that the prior art discloses or makes obvious the claim limitation, in independent claim 23, of "estimating the bandwidth of said wireless interconnection based on respective arrival times, at said receiver, *of only those ones of said first plurality of packets for presentation to said viewer at said receiver that are included in said second plurality of packets*" or the claim limitation, in independent claim 35, of "estimating the bandwidth of said wireless interconnection based on respective arrival times, at said receiver, *of only those packets of said contiguous sequence of data included in said plurality of packets*" (emphasis added). As explained below, the Examiner merely alleges that the primary reference, Gvozdanovic, discloses that voice data transmitted over a network can be policed to conform to both an average transmission rate (sustained cell rate SCR) and a maximum transmission rate

(peak cell rate) while one of the secondary references, Gross, discloses that bandwidth can be estimated from the arrival times of data packets at a receiver. Absent from the Examiner's rejection is any assertion that the prior art discloses or makes obvious the limitation of estimating bandwidth based on the arrival times of *only the packets sent at Gvozdanovic's peak cell rate*.

Specifically, the primary reference Gvozdanovic discloses that an application that transmits audio in a bitstream over a network may have various *constraints* imposed on that bitstream, including a limit on the long-term average (SCR) and short-term burst transmission rates (PCR) of data packets in the bitstream. Because Gvozdanovic defines an average and maximum rate of transmission as limits, and discloses no protocol for actually transmitting any defined set of packets at either of those defined bitrates, then that reference cannot be deemed to disclose the limitations quoted above, and the Examiner concedes that these limitations are not disclosed by Gvozdanovic. See Office Action at p. 5.

The Examiner appears to cite Seo merely for its disclosure of disclosing the transmission of video to a viewer over a wireless network, and appears to cite Fang merely for its disclosure of the definitions of the terms sustained cell rate and peak cell rate. The Examiner makes no allegation that Fang discloses using only data transmitted at the peak cell rate to estimate the bandwidth of a channel, and in fact, the applicant notes that Fang merely discloses that these rates be used as limits such that data transmitted by an application above these rates is diverted to a buffer. See Fang at par. 0093. Hence the disclosure of Fang is merely duplicative of that of Gvozdanovic.

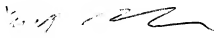
With respect to Gross, the Examiner alleges nothing more than that it discloses "estimating the bandwidth of said interconnection based on respective arrival times, at said receiver, of a *first plurality of packets* at said receiver." (emphasis added). The

limitations at issue, however, respectively require that the packets used to estimate bandwidth be transmitted at the "second average rate" (claim 23) or at a rate "greater than the average rate for transmitting said data to a receiver" (claim 35). The Examiner, having used Gvozdanovic to show a prior art disclosure of defining a transmission rate for transmitting a subset of packets in a collection of data, greater than the average rate of transmitting the entire collection, then must show that Gross teaches estimating bandwidth based on arrival times of only packets included in the subset transmitted at the higher rate. Not only has the Examiner failed to make this allegation, but a cursory inspection of Gross indicates that it fails to disclose the claimed feature. For example, the Examiner specifically points to paragraph [0006] of this reference, but this passage merely states that "to measure bandwidth, one computer . . . sends out data packets which are received by the second computer The second computer measures bandwidth of the network by diving (sic) the number of bits transmitted by the difference in arrival times of the first and last packet." Nothing in this passage, or the remaining portions of Gross limits the packets used to estimate bandwidth to those transmitted at the peak cell rate disclosed by Gvozdanovic. Because the Examiner's rejection fails to address these limitations, the Examiner's respective rejections of claims 23-25, 27-31, 33-37, and 39-45 was improper, and should be withdrawn.

In view of the foregoing amendments and remarks, the applicant requests reconsideration and allowance of claims 23-25, 27-31, 33-37, and 39-45.

Respectfully submitted

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Dated



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